

=> s 261731-66-2/rn  
L3 5 261731-66-2/RN

=> d 1-5 pn,ab

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
PATENT NO. KIND DATE

	PATENT NO.	KIND	DATE
PI	WO 2001058963	A1	20010816
	DE 10005819	A1	20010823
	BR 2001008153	A	20030121
	EP 1287040	A1	20030305
	JP 2003522257	T2	20030722
	US 2003100673	A1	20030529

AB Dispersions containing dispersed and/or emulsified solid and/or fluid polymer particles and/or dispersed solid core-shell particles with particle diameter  $\leq 500$  nm, which may be produced by radical micro- or mini-emulsion polymerization of  $\geq 1$  olefinically unsatd. monomer in the presence of  $\geq 1$  C9-16 polyhydroxy (cyclo)alkane, are useful in automobile production and repair painting, furniture painting and industrial painting, including coil coating, container coating and coating of electrotech. components. Thus, a solution consisting of blocked polyisocyanate 200.3, Me methacrylate 99, Bu acrylate 118, styrene 49.5, hydroxypropyl methacrylate 106.6, Ph2C:CH2 7.6, and 2,4-diethyl-1,5-octanediol 19 parts was mixed with 35.1 parts Perkadox 16S and emulsified in 848.9 parts H2O containing 16 parts Abex EP 110 emulsifier to give a mini-emulsion with z-average particle size 215 nm. The emulsion was polymerized 1 h at 70° to give a polymer emulsion (40.1 weight% solids) with z-average particle size 247 nm, which was combined with a thickener and a flow-control additive, sprayed onto a test plate which had been precoated by cathodic electrodeposition, and baked 30 min at 150° to give a multilayer coating with a 57- $\mu$ m clear topcoat.

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
PATENT NO. KIND DATE

	PATENT NO.	KIND	DATE
PI	WO 2001051537	A1	20010719
	DE 10001443	A1	20010726

AB The agent, useful in coatings, sealants and adhesives, can be produced by reaction of  $\geq 1$  primary and/or secondary amine and/or water with  $\geq 1$  polyisocyanate in  $\geq 1$  low-mol.-weight liquid polyol acting as the reaction medium. Thus, addition of a solution of 7.9 parts hexamethylene diisocyanate in 102 parts BuOAc dropwise over 2 min to a solution of 10.1 parts PhCH2NH2 in 480 parts 2,4-diethyl-1,5-octanediol and stirring for an addnl. 10 min gave a composition with viscosity 8080. 1920, 685, and 308 dPa-s at shear rate 1, 10, 100, and 1000 s<sup>-1</sup>, resp. The agent was used in a clear lacquer formulation based on a polyacrylate and a polyester binder cocrosslinked with diisocyanates.

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN  
PATENT NO. KIND DATE

	PATENT NO.	KIND	DATE
PI	WO 2000015725	A1	20000323
	DE 19841408	A1	20000323
	DE 19841408	C2	20010215
	BR 9913574	A	20010522
	EP 1119592	A1	20010801
	JP 2002524650	T2	20020806
	US 6512026	B1	20030128

AB The powders, especially useful in automotive finishes, consist of (a)  $\geq 1$  epoxide-containing binder containing 0.5-40 weight% of a polymerized monomer containing glycidyl groups and (b)  $\geq 1$  tris(alkoxycarbonylamino)triazine and  $\geq 1$  polycarboxylic acid, especially a straight-chain dicarboxylic acid,

and/or a carboxy-functional polyester as crosslinking agent or, alternatively, (a)  $\geq 1$  tris(alkoxycarbonylamino)triazine and  $\geq 1$  oligomeric or polymeric epoxide-containing crosslinking agent containing 0.5-40 weight% of a polymerized monomer containing glycidyl groups and/or a low-mol.-weight epoxide-containing crosslinking agent and (b)  $\geq 1$  polymer containing carboxyl groups as binder, whereby both variants contain (c)  $\geq 1$  polyol. Thus, Me methacrylate (I) 10.78, Bu methacrylate (II) 25.5, styrene 17.39, and glycidyl methacrylate 23.95 parts were copolymd. to give an epoxide-containing polymer (III), whereas I 17.45, II 14.09, styrene 16.78, and hydroxypropyl methacrylate 18.79 parts were copolymd. to give a polyol (IV). A powder was obtained from III 62.8, dodecanedicarboxylic acid 13.5, a tris(alkoxycarbonylamino)triazine 5.0, IV 14.8, and stabilizers 3.3 parts, and made into an aqueous slurry, which was sprayed at dry thickness 44  $\mu\text{m}$  on an electro-dip-primed and -coated (Ecostar Jungle Green) and dried steel plate. The coated plate showed equal, or in most cases better, performance properties when compared with an analogous plate treated similarly except that the powder contained no IV.

L3 ANSWER 4 OF 5 USPATFULL on STN

PI US 2003100673 A1 20030529

AB Aqueous primary dispersions comprising dispersed and/or emulsified, solid and/or liquid polymer particles and/or dispersed solid core-shell particles having a diameter  $\leq 500$  nm, preparable by free-radical microemulsion or miniemulsion polymerization of at least one olefinically unsaturated monomer (A) in the presence of at least one polyhydroxy-functionalized cyclic and/or acyclic alkare having from 9 to 16 carbon atoms in the molecule, and their use in automotive OEM finishing and refinishing, in furniture coating and in industrial coating, including coil coating, container coating and the coating of electrical components.

L3 ANSWER 5 OF 5 USPATFULL on STN

PI US 6512026 B1 20030128

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AB Novel powder clearcoat materials and novel powder clearcoat slurries comprising a) at least one epoxide-containing binder containing from 0.5 to 40% by weight, based on the binder, of copolymerized glycidyl-containing monomers, and b) at least one tris(alkoxy-carbonylamino)triazine and at least one polycarboxylic acid, in particular a straight-chain dicarboxylic acid, and/or a carboxy-functional polyester as crosslinking agent, or alternatively a) at least one tris(alkoxy-carbonylamino)triazine and at least one oligomeric or polymeric, epoxide-containing crosslinking agent containing from 0.5 to 40% by weight, based on the crosslinking agent, of copolymerized glycidyl-containing monomers, and/or a low molecular mass, epoxide-containing crosslinking agent, and b) at least one carboxyl-containing polymer as binder, both variants comprising c) at least one polyol.

=> d his

(FILE 'HOME' ENTERED AT 00:15:47 ON 16 MAR 2004)

FILE 'REGISTRY' ENTERED AT 00:16:00 ON 16 MAR 2004

L1 0 S 2,3-DIETHYLOCTANE-1,2-DIOL

L2 9 S DIETHYLOCTANE

FILE 'CAPLUS, USPATFULL' ENTERED AT 00:19:45 ON 16 MAR 2004

L3 5 S 261731-66-2/RN

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